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ABSTRACT

General semantics and science fiction are disciplines that can be incorporated in lectures for public speaking and other speech communication classes. Alfred Korzybski's theories of general semantics lend themselves to researching, preparing, delivering interpersonal communication messages, and establishing student interest in foreign languages, as well as to such disparate fields as teaching, dentistry, and fiction writing. The basic instructional model "sf + gs = K" (science fiction + general semantics = Knowledge) can be useful for interdisciplinary and intercultural curricula, and the addition of an "x" factor to the basic formula would represent an added academic discipline or off-campus condition (sf + gs + x = K). Science fiction authors such as A.E. Van Vogt, Robert Heinlein, Frank Herbert, and Aldous Huxley have been influenced by Korzybski's theories, and their novels represent a popularization of general semantics. Teachers could introduce a unit on science fiction with a lecture on general semantics, referring to the works of Van Vogt or Heinlein. In a Japanese classroom setting, students could assess a single Japanese author's stories relative to the fantastic as a source of national inspiration, for example, or to national introspection relative to the here and now. Foreign language studies might be enhanced by having students read science fiction both in their native language and in the language they are learning. Korzybski maintained that his theories were applicable in different contexts of human communication, and the addition of the basic formula of sf + gs + x = K shows the applicability of general semantics to various academic disciplines. (Thirty-five footnotes are appended.) (NKA)

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SCIENCE FICTION AND GENERAL SEMANTICS
AS INTERDISCIPLINARY/CROSS-CULTURAL TEACHING AIDS

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SCIENCE FICTION AND GENERAL SEMANTICS
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ABSTRACT

For several years, the author of this paper has included general semantics and SF (science fiction/science fantasy/speculative fiction) in lectures for public speaking and other speech communication classes. Oral (including broadcasting) and written communication teaching techniques, and student assignments, are featured in this paper.

Documented relationships are made in this paper relative to SF authors proselytizing Korzybski's general semantics. As an example, some SF authors have referred to general semantics in public speeches which they have made or lectures which they have given. Such examples tend to bring contemporary off-campus world "realism" of the subject matter into the classroom. Korzybski's general semantics "tools" lend themselves to researching, preparing and delivering interpersonal communication messages. General semantics tools suggested for assignments include: the natural order of evaluating, multivaluedness, indexing and dating, non-allness and symbol versus signal reacting.

Suggestions are made in this paper relative to how general semantics and SF can aid in establishing more student interest in foreign language studies. Current world wide popularity of SF combined with general semantics communicating techniques can enable teachers and students to establish unique assignments and projects which can enhance learning a new language. Assignments

include: content analyses of favorite SF authors and stories using general semantics criteria; and, radio-television adaptations in the language being learned.

Intercultural studies can be enhanced by knowing some of the basic premises of general semantics; e. g., multivaluedness. Through general semantics considerations students can understand and better accept the point of view that different peoples in different cultures/nations have valid reasons for believing the way that they do. Students may use content analyses to ascertain whether or not SF authors in various countries include political and/or cultural designations in their stories. Students can be involved in primary research techniques by interviewing SF authors for data which is not otherwise available.

Teaching techniques and student assignments recommended in this paper stress "real life," (outside of the classroom) experiences in human communicating, analysis and evaluation.

I.

For several years I have studied and taught general semantics within the context of speech communication classes. But, general semantics applies to other academic and non-academic disciplines. General semantics theories of communicating are applied to such disparate fields of endeavor as teaching,¹ dentistry,² and fiction writing, to name only a few. General semantics has advocates around the world, including Japan.³ The model proposed in this paper suggests using general semantics to enhance teaching and learning.

For the convenience of this paper science fiction, science fantasy, "sci-fi", speculative fiction and et cetera, are given the designate of SF.⁴ These genre/sub-genre are currently popular among persons of all ages and intellectual levels throughout the world. Some believe that SF satisfies basic human expectations which are not being met in highly developed societies.⁵ Educational processes can be made more meaningful to some students through the use of SF.⁶ SF has been related to the study and practice of at least the following: anthropology, sociology, religion and psychology.⁷

It is interesting to note that general semantics and SF have been closely related in fiction and nonfiction.⁸ One of the beauties of using SF and general semantics in education is that "the sky is the limit."

A model is suggested to indicate how SF may be teamed with general semantics and used to advantage for interdisciplinary and intercultural curricula. The basic model may be written as:

$$sf + gs = K$$

Let gs = general semantics, sf = science fiction, and K = Knowledge. An "x" factor may be added to the basic formula and would represent an added academic discipline or off-campus condition:

$$sf + gs + x = K$$

II.

Alfred Habdank Skarbek Korzybski is known as the father of General Semantics. Manhood Of Humanity was first published in 1921 and presents Korzybski's theories of how we can reach a proper level of maturity through intra/interpersonal communicating.⁹ Korzybski's major work is entitled, Science And Sanity: An Introduction To Non-Aristotelian Systems And General Semantics.¹⁰

Korzybski maintained that general semantics is a more proper technique for communicating which includes checking fact-territories first and then constructing symbols which accurately reflect those territories. Taking the premise that human beings are predictors: "...if our orientations and evaluations are inadequate, our predictability is impaired....If we have a more adequate or proper evaluation, we would have more correct predictability, etc...."¹¹

The purpose of this paper is not to explicate or defend general semantics and SF. Sources in the Notes and References section of this paper can do that. The following general semantics theories have been arbitrarily chosen for the convenience of this paper: (1) what designates "Intensional" (to be eschewed) communicating as opposed to "Extensional" (to be advocated) communicating; (2) the Natural Order of Evaluating

"facts" first for "reality" versus "fantasy" communicating; and, (3) how symbols (verbal and nonverbal) affect our nervous systems during intra/interpersonal communicating. There are various "devices" subsumed under each of these major categories which may be used as "criteria" for teacher lectures or student assignments. Teachers and students may read Korzybski (or other general semanticists) and establish their own criteria for lectures and assignments.

III.

Some SF writers help readers think about knowledge in our real world and relationships "between the knower and the known."¹² Such a writer is A. E. van Vogt. Some obvious connections to be made between van Vogt's work and general semantics are the following.

Van Vogt's first general semantics novel, The World Of A first appeared in serial form in the Street and Smith publication, Astounding Science Fiction magazine in 1945. Simon and Schuster published the novel in book form in 1948. Berkley Medallion reprinted the novel in 1977.

The sequel to World was, The Players Of Null-A, and appeared in the last three 1948 issues of Astounding Science Fiction and concluded in the January, 1949 copy. Ace Books published this novel as The Pawns Of Null-A in 1956.

Subsequent to Simon and Schuster's publication of the first novel, the Korzybskian trade-mark " A " became "Null-A" because the latter has been easier to print.

The first publication of Null-A Three was in France in 1984 by Editions J'ai Lu and by the Morrison, Raven-Hill Company of

Berkshire, England and Beverly Hills, California. Sphere Books of London published its paperback edition in 1985.

Some, including van Vogt himself, credit the above mentioned novels with popularizing general semantics more than the two official organizations (listed in the Notes And References section of this paper) have ever been able to do.

Other authors who may be studied for their direct connections with Alfred Korzbyski's general semantics include Robert Heinlein, Frank Herbert and Aldous Huxley.¹³

$$\text{Equation: } gs + sf = K$$

IV.

The following are additional suggested classroom teaching preparations and/or student assignments for combining general semantics and/or SF with other academic disciplines.

(1) I have found that sometimes I can obtain more student interest in speech communication classes if I make a connection between general semantics and SF authors and stories. The connection with a speech class is that I have included general semantics criteria for public speaking and audience analysis of speakers. General semanticists often point out the practicality of their discipline in everyday life. Explaining to students how some authors have made their livings using general semantics is an attention-getting way to show students how the theory they are studying in the classroom has practical applications. Also, sending students out of the classroom to evaluate a speaker in a non-academic situation is an effective way of learning general semantics and public communicating techniques. Finding a speaker who purposely uses general semantics would be ideal!¹⁴

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Teachers and students might find learning enhanced by reading the text of Ursula K. LeGuin's 1972 National Book Award Acceptance Speech¹⁵ and apply general semantics criteria for an extensional/intensional evaluation.

$$\text{Equation: gs} + \text{sf} + \text{public speaking} = \text{K}$$

(2) Students can write their favorite contemporary SF authors asking for comments about A. E. van Vogt and his general semantics stories. A collection of such responses can be put into a single or group report. This report can be written and presented to the class orally for a grade. Grading can include factors for writing compositions as well as criteria for a speech to inform for a single student or techniques for group discussion before the class. SF author Norman Spinrad suggests criteria for SF as literature instead of its traditional trash status.¹⁶

$$\text{Equation: sf} + \text{written reports} = \text{K}$$

Local authors are often willing to be interviewed for classroom use. Authors could even visit classrooms for a presentation about their work and/or knowledge of general semantics. (Teachers should be prepared for visiting authors who either don't know general semantics or take an unfavorable view toward the subject.) Such classroom visits could be audio and/or video recorded for use in future classes.

In Japan an author, or series of authors, might be asked: Does SF fulfill a need because of something going on in contemporary Japanese society?¹⁷

For legal purposes, a signed release should be obtained from the author being interviewed.

Equation: sf + interviews + audio/video recording = K

Teachers can begin units with a lecture on general semantics, establish criteria such as indicated at the beginning of this paper and refer to the works of A. E. van Vogt. An assignment can then be given for students to read their favorite SF author and conduct content analyses to find examples of general semantics criteria for "reality" and "fantasy" in the dialogue of characters or the author's narrative style.

Students could read Robert Heinlein's Mehuselah's Children to search for obvious general semantics references. As an example, at the beginning of the story a brief review of the history of the special people known as the "Family" includes the "Crazy Years."

"...The trustees of that date decided-correctly, we now believe-that any minority during that period of semantic disorientation [italics added] and mass hysteria was a probable target for persecution, discriminatory legislation, and even of mob violence...."¹⁸

In the next few pages Heinlein's characters speak of a "new orientation" for a "sane and peaceful citizen", evaluating data "without excessive emotional disturbance," a "sane, normal reaction," and, "facts" upon which to base limited extrapolations. Students could find such references and the teacher could help interpret and make connections between literal or suggested general semantics terminology and theories. Further analysis of the story could attempt to identify the extensionality/intensionality of characters and their actions.

- a. The results of the content analyses can be written.

- b. The results of the content analyses can be presented in a speech.

$$\text{Equation: sf} + \text{gs} + \text{written report/speech} = K$$

(3) In a popular culture studies class written and/or spoken assignments can be the result of reading fiction or non-fiction about a select group of people and their life-styles. Philosophical foundations of a culture are applicable to general semantics comparisons and analyses; e. g. general semantics and Buddhism.¹⁹

Applying general semantics criteria to various facets of contemporary cultures can open the eyes and minds of students.

"...the study of popular culture provides a bridge between nations. It goes without saying that he who has learned a second culture becomes perceptive and sensitive to similarities and learns to work through differences...."²⁰

Noting similarities and differences are major general semantics criteria for extensional (good) communicating.

Japanese students and teachers might want to investigate whether or not "popular culture" in their country is still restricted to "taishu bunka" (mass culture, specifically arts and entertainment).²¹

Using SF in popular culture classrooms could include: (1) assessing a single Japanese author's stories relative to "the fantastic as a source of [national] inspiration"; (2) national introspection relative to the here and now; and, (3) considerations of Japan's future.²²

$$\text{Equation: gs} + \text{sf} + \text{popular culture studies} = K$$

(4) To familiarize students with computer usage, such as word processing and data base programs, students might want to type SF short stories and/or authors' public speeches onto disks.²³ Various content analyses²⁴ procedures can then be applied more quickly; e. g., word/phrase counts for style²⁵ and general semantics extensionalism/intensionalism.

$$\text{Equation: sf + gs + computers} = K$$

In the Summer of 1986 a computer service was inaugurated at Rensselaer Polytechnic Institute with the assistance of the Eastern Communication Association in the United States and the Speech Communication Association of America. The service is called "Comserve" and lists teaching, research materials and a directory of persons interested and active in various aspects of human communication. Comserve is interfaced with BITNET, the world wide inter-university computer network which is in use in at least ten Japanese schools.²⁶ Students and teachers with access to BITNET on their school's mainframe, can combine communication research and "conversations" with network members while learning computer techniques.²⁷ Using such computer data base systems can enhance SF and/or general semantics assignments along with other speech communication work.

$$\text{Equation: sf and/or gs + computers} = K$$

OR

$$\text{Equation: speech communication + computers} = K$$

(5) Foreign language studies may be enhanced by having students reading SF stories in their native language and the language which they are learning. Comparing and contrasting

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authors and stories could be a more interesting approach to language learning for some students.

A possible reading assignment while learning the Japanese language would be to give students the assignment to read Japanese SF stories to check for authors' treatment, or lack of it, of the "sun."²⁸

$$\text{Equation: sf} + \text{language studies} = K$$

Foreign language studies might prove more interesting to students if they could write a radio play based on an SF story by an author writing in the language which they are studying. A short story, for instance, could be rewritten for a radio or television play with actors, sound effects, music, et cetera. The play could simply be put on tape for playback to the language class or, produced in front of an audience of non-class members.

$$\text{Equation: sf} + \text{radio/television play} + \text{language} = K$$

(6) Journalism instruction could include general semantics criteria in collecting data and writing stories. In my broadcast news reporting classes I lecture on basic general semantics criteria such as the Natural Order of Evaluation-observing facts as best as possible and then producing symbols(words) to describe what has been observed. Students are then graded on stories which deal with facts versus opinions-their own and those whom they interview. This is a good way to correct a story and rewrite for accuracy and more brevity in broadcasting.²⁹

Journalism classes could use general semantics criteria to analyze politicians and their speeches.

$$\text{Equation: gs} + \text{journalism} = K$$

(7) Intra/interpersonal communicating classes can use general semantics criteria for preparing and/or analyzing informal communicating situations.

Teachers and students might want to check SF stories for authors' indications of "principles in terms of which statements assume meanings" in any world and with any sentient.³⁰

Van Vogt has a basic thought about students in the classroom and general semantics. "Just imagine if somehow...in the classroom the instructor asked the general semantics students to think in the direction of [achieving an integrated personality]. 'You're now integrating yourself on a new level and I want to see what happens to you, what you personally decide to do in terms of bringing yourself into an integrated person. You know. Integrated with general semantics and your goals in life, all put together.'³¹ Such an integrated student, says van Vogt, would walk and talk with more confidence and perhaps even look a little more healthy.

Equation: $gs + \text{intra/interpersonal communicating} = K$

V

Korzybski maintained that his theories were applicable in different contexts of human communicating. The basic modeling presented in this paper attempts to show the applicability of general semantics to various academic disciplines. Additional formulae may be established for non-academic situations.

SF seems now to be recognized as a bona fide literary genre which could stimulate learning.³² Through SF (and general semantics) Japanese students-as with students around the world-can learn more about the distinctions to be made between

kyo(fiction) and jitsu(reality).³³

International and intercultural studies are currently receiving much academic attention. These studies can include communicating by way of general semantics and SF. General semantics and SF can be helpful to students and teachers in distinguishing between "universal humankind" factors and local specifics.³⁴ Japanese examples stated in this paper are applicable to other cultures.

SF, general semantics and education can aid human beings in dealing with that which causes some to be "haunted by the terrors of the night"³⁵; i. e., knowledge.

NOTES AND REFERENCES

1. Mary Morain, (ed.), Classroom Exercises In General Semantics, San Francisco: International Society for General Semantics, 1980.

See also: Kenneth G. Johnson, Graduate Research In General Semantics, Englewood, New Jersey: Institute Of General Semantics, 1985.

An example of another area where general semantics is applicable is R Buckminster Fuller's work. The author of this paper wrote his doctoral dissertation on connections between Korzybski and Fuller: "Alfred Korzybski and Buckminster Fuller: A Study in Environmental Theories," unpublished Ph.D. dissertation, Southern Illinois University, Carbondale, 1972. See also: Harold L. Drake, "An Interview With Buckminster Fuller," General Semantics Bulletin, Nos. 38, 39, 40 (Winter, 1976), 56-58.

2. Abdul Salaam, "A General Semantics Approach to the Practice of Dentistry," General Semantics Bulletin, Nos. 44 & 45, (1977 & 1978), 5759.

3. "Members Of The Institute, Libraries, Information," General Semantics Bulletin, No. 51, (1984), 139, 141.

Addresses for more information: Institute of General Semantics, 163 Engle Street, Englewood, New Jersey 07631 USA; and, International Society for General Semantics, PO Box 2469, San Francisco, California 94126 USA.

4. For discussion and definitions of "science fiction," "science fantasy," and "sci-fi," see: Norman Spinrad, "On Books: Science Fiction Versus Sci-Fi," Isaac Asimov's Science Fiction, Mid-December, 1986, pp. 178-191.

5. For a discussion relative to SF and psychological needs in the USA, see: Robert Sandels, "UFOs, Science Fiction and the Postwar Utopia," Journal of Popular Culture, Vol. 20 (Summer, 1986), 141-151.

6. As an example, see: L. David Allen, The Ballantine Teachers' Guide To Science Fiction: A Practical Creative Approach to Science Fiction in the Classroom, New York: Ballantine Books, 1975.

7. See: Martin Harry Greenberg, Carol Mason and Patricia Warrick, (eds.), Anthropology Through Science Fiction, New York: St. Martin's Press, 1974; Martin Harry Greensberg, John W. Milstead, Joseph Olander and Patricia Warrick, (eds.), Sociology Through Science Fiction, New York: St. Martin's Press, 1974; Martin Harry Greenberg and Patricia Warrick, The New Awareness: Religion Through Science Fiction, New York: Delacorte Press, 1975; Henry Greenberg, John W. Milstead, Joseph D. Olander and Patricia Warrick, (eds.), Social Problems Through Science Fiction, New York: St. Martin's Press, 1975; and, Martin Harry Greenberg, Harvey A. Katz and Patricia Warrick, (eds.), Introductory Psychology Through Science Fiction, Skokie, Illinois: Rand McNally, 1974.

8. William Sims Bainbridge, Dimensions Of Science Fiction, Cambridge, Massachusetts: Harvard University Press, 1986, pp. 209211. Bainbridge briefly writes of Korzybski's theories as being "another pseudoscientific movement that was promoted through SF...."; e. g., some works of A. E. van Vogt and L. Ron Hubbard. Bainbridge fails to mention Herbert, Heinlein and Huxley in connection with general semantics.

9. The following edition is recommended for its addenda material: Alfred Korzybski, Manhood Of Humanity, Second Edition, Lakeville, Connecticut: The International Non-Aristotelian Library Publishing Company, 1968.

10. Alfred Korzybski, Science And Sanity: An Introduction To Non-Aristotelian Systems And General Semantics, First Edition, First Printing, (No Publisher's City Listed): The International Non-Aristotelian Library Publishing Company, 1933. (The first edition was printed by Science Press of Lancaster, Pennsylvania.)

11. Korzybski, Science And Sanity, p xxxiii.

12. Michael Philips, (ed.), Philosophy And Science Fiction, Buffalo, New York: Prometheus Books, 1984, p. 3. Philips presents another perspective relative to science fiction/science fantasy popularity and value to readers.

13. Two other authors in the science fiction/science fantasy genre have publicly indicated that Korzybski's general semantics has had an influence on their lives and/or writing.

For Robert Heinlein's connections with general semantics see: Harold L. Drake, "The General Semantics And Science Fiction of Robert Heinlein And A. E. van Vogt," General Semantics Bulletin, Nos. 41, 42 & 43, Spring, 1977, 132-144.

See also: Timothy O'Reilly, Frank Herbert, New York: Frederick Ungar Publishing Co., 1981, pp 59-60.

Aldous Huxley was enthusiastic about Korzybski's discipline:"...Have you read Korzybski's Science and Sanity? If not, I think you shd-in spite of the fact that the author is maddening and his book 800 pp long. For he does seem to have said things about 'Semantics'-the relation of words to things and

events-which are of the highest importance...." See: Grover Smith, (ed.), Letters Of Aldous Huxley, New York: Harper & Row, 1969, pp. 436, 438, 453, 491. Other general semanticists, Irving J. Lee and S. I. Hayakawa, are also mentioned in Huxley's letters.

14. In his interviews with me van Vogt has spoken about public presentations which he has given over the years, especially in the Los Angeles area. For Heinlein speeches, see: Harold L. Drake, "The General Semantics And Science Fiction Of Robert Heinlein And A. E. van Vogt," Op. Cit., 138-140.

15. Ursula K. LeGuin, "National Book Award Acceptance Speech," in The Language Of The Night: Essays On Fantasy And Science Fiction, Edited and with Introductions by Susan Wood, New York: Berkley Books, 1985, pp. 57-58.

16. Norman Spinrad, Op. Cit. The content and easy reading of this article could be the basis for evaluating an SF author, or, the starting point for more academic research/criteria for evaluation.

17. Sheila Finch-Reyner, "The Unseen Shore: Thoughts on the Popularity of Fantasy," Journal of Popular Culture, Vol. 18 (Spring, 1985), 127-134. Finch-Reyner maintains that technological cultures breed SF popularity.

18. Robert A. Heinlein, Methuselah's Children, New York: Signet Books, 1958.

19. See, for example: John Calhoun Merrill, "Korzybskian Semantics and Buddhism: Some Philosophical Parallels," Asian Profile, Vol. 5, No. 5, (October, 1977), 453-462.

20. Seiji Shibatga and Kazuo Yoshida, "Preface" to "In-Depth Section: Japanese Popular Culture," Journal of Popular

Culture, Vol. 17 (Summer, 1983), 101.

21. Masaaki Kishi, "The Study Of Popular Culture In Japan," Journal Of Popular Culture, Vol. 13, (Summer, 1979), 172. This article presents a beginning history of popular culture in Japan.

22. In these connections and also for a brief history of SF in Japan, see: David Lewis, "Japanese SF," in Neil Barron, (ed.), Anatomy of Wonder: A Critical Guide To Science Fiction, Second Edition, New York: R. R. Bowker Company, 1981, pp. 467-496.

23. For speech communication research ideas including computer use also see: R.B. Rubin, A.M. Rubin and L.J. Piele, Communication Research: Strategies And Sources, Belmont, California: Wadsworth Publishing Company, 1986.

Speech communication conventions in the United States are including more presentations relative to computers. The Speech Communication Association of America has an active Computer Task Force.

24. For more specific computer use in analyses see: Edmund A. Bowles, (ed.), Computers In Humanistic Research, Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1967; and, R. A. Wisbey, (ed.), The Computer In Literary And Linguistic Research, London: Cambridge University Press, 1971.

25. An excellent example of literature content analysis may be found in: Robert L. Gale, Louis L'Amour, Boston: Twayne Publishers, 1985.

26. In a letter to the author of this paper from professor Teresa M. Harrison, Rensselaer Polytechnic Institute, Troy, New York, USA and dated December 9, 1986, Professor Harrison lists the following Japanese schools as being on the BITNET system:

Tsukuba University of Kou Enerogi Ken; Kanazawa Institute of Technology; Nagoya University of Commerce; Osaka Institute of Technology; Sensunan University; Science University of Tokyo-Kagurazaka; Science University of Tokyo-Noda; Tokyo Keizai University; University of Tokyo; and, Waseda University.

27. Spectra, Vol. 22, (November, 1986), 5, 7. This is a monthly publication of the Speech Communication Association of America. Address: Speech Communication Association, 5105 Backlick Road, Suite E, Annandale, Virginia 22003, USA.

For further information on the Comserve system, write: Comserve, Department of Language, Literature And Communication, Rensselaer Polytechnic Institute, Troy, New York 12180 USA.

See also: Timothy Stephen and Teresa M. Harrison, Comserve User's Guide-Version 1.2, Troy, New York: Rensselaer Polytechnic Institute, 1986.

28. The following article provides examples of using the "sun" symbol in various content analyses including literature: Schultz and Fumiko Yamamoto, "Japan: Land of the Rising and Setting Sun: A Study of the Image of the Sun in Japanese Culture," Journal of Popular Culture, Vol. 18 (Fall, 1984), 117-134.

29. As examples of evaluating news stories see: Harold L. Drake, "A General Semantics Paradigm For Intra-Intercultural Mass Communicating," ERIC, December, 1984; and, Harold L. Drake, "A General Semantics Paradigm For Intra-Intercultural Mass Communications: Part II, Cultures of the Pacific," presented at the Communication Association of the Pacific, Tokyo, July 24, 1983.

30. George F. Seffler, "Science, Science Fiction, and Possible World Semantics," in William Coyle, (ed.), Aspects of Fantasy, Westport, Connecticut: Greenwood Press, 1986, pp. 213-219.

31. This quotation is from an interview with A. E. van Vogt in his home July 9 and July 11, 1985, copyright 1986 by Harold L. Drake.

32. An example of SF academic recognition in the United States may be found in the following: John Aquino, Science Fiction As Literature, Washington, D. C.: National Education Association, 1976.

33. Miyoko Sasaki and Heinz Balkenhol, "Rakugo: Fascination for and Popularity of one of the Classical Japanese Arts of Narration," Journal Of Popular Culture, Vol. 13, (Summer, 1979), 165(f).

34. Isamu Kurita, "Revival of the Japanese Tradition," Journal of Popular Culture, Vol. 17, (Summer, 1983), 133-134.

35. Finch-Reyner, Op. Cit., p. 133. Finch-Reyner writes that what human beings cannot understand creates a form of terror in their consciousness or subconsciousness. Finch-Reyner also provides some distinctions among myth, fairy tales, fantasy and science fiction within cultures.